



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,701	07/31/2001	Scott D. Sturgeon	10014835 -1	5394

7590 10/20/2004  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
----------

NGHIEM, MICHAEL P

ART UNIT	PAPER NUMBER
----------	--------------

2863

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/919,701	Applicant(s) STURGEON ET AL.	
	Examiner Michael P Nghiem	Art Unit 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17-20 and 26-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-20 is/are allowed.
- 6) ☒ Claim(s) 26-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

The Amendment filed on August 19, 2004 has been acknowledged.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 26-46 are rejected under 35 U.S.C. 102(e) as being anticipated by Miyazawa et al. (US 6,250,750).

Regarding claims 26, 37, and 42, Miyazawa et al. discloses a carriage (101) for an inkjet printer (column 1, lines 6-8) comprising:

- a printhead mounting portion (150);
- a printhead operably secured to said mounting portion (Figs. 12b-12d);
- an ink reservoir mounting portion (comprises 115, 117) pivotally secured to said printhead mounting portion (Fig.s 12's);

- an ink reservoir (120) operably secured to said ink reservoir mounting portion (120 is secured on 117, Figs. 12b-12d) to define a secured position in which said ink reservoir is secured to said ink reservoir mounting portion (Figs. 12b-12d);

- said ink reservoir having an engaged position in which the ink reservoir is in fluid communication with said printhead (Figs. 12c, 12d) when said ink reservoir is in said secured position (120 is secured on 117), and an open position, in which the ink reservoir mounting portion is pivoted away from said printhead mounting portion (Fig. 12b) such that said printhead may be removed from above said printhead mounting portion (printhead 118 may be removed from 150, Fig. 12b) without removing said ink reservoir from said secured position on said ink reservoir mounting portion (cartridge 120 remains secured on 117 while 118 is removed from 120, Fig. 12b).

Regarding claim 27, Miyazawa et al. discloses:

- a plurality of ink reservoirs (Fig. 11);
- a plurality of printheads (for each holder 150, Fig. 11);
- wherein one of each plurality of ink reservoirs is in fluid communication with a respective one of each plurality of printheads in said engaged position (one holder 150 for each cartridge 120, Fig. 11).

Regarding claims 28 and 38, Miyazawa et al. discloses a channel (channel of 119) extending between said ink reservoir and said printhead in said engaged position (Figs. 12c, 12d).

Regarding claims 29 and 39, Miyazawa et al. discloses that said channel is substantially air tight (119 not exposed to ambient, Fig. 12d) when said carriage is in said engaged position (Fig. 12d) such that a vacuum formed in the channel will cause ink to flow (ink flow from 120 to 118 due to back pressure of 118), and said channel is not substantially air tight when the carriage is moved out of its engaged position, thereby preventing ink from flowing through the channel (119 is exposed to ambient, no ink flow from 120 to 118, Fig. 12b).

Regarding claims 30, 40, 43, and 44, Miyazawa et al. discloses that said printhead mounting portion is pivotally secured to said ink reservoir mounting portion at a pivot point (pivot point on 110, Figs. 12's).

Regarding claim 33, Miyazawa et al. discloses:

- a resistive detent (106a) on one of said printhead mounting-portion and said ink reservoir mounting-portion (Figs. 12's);
- a tab (116) extending from the other of said printhead mounting-portion and said ink reservoir mounting-portion for operably engaging said resistive detent when said ink reservoir is in said open position (Fig. 12a), thereby holding the ink reservoir in said open position to further facilitate removal of the printhead (Fig. 12a).

Regarding claim 34, Miyazawa et al. discloses a shaft (117) extending from one of said printhead mounting-portion and said ink reservoir mounting-portion (Figs. 12's), said

Art Unit: 2863

shaft having a mating end portion (106) and a mating hole (opening of 106) for receiving said shaft in the other of said printhead mounting-portion and said ink reservoir mounting-portion (Figs. 12's), said mating hole including a notch (bottom opening of 106) for operably receiving said mating end portion of said shaft only when said ink reservoir is in said engaged position (Fig. 12d).

Regarding claim 35, Miyazawa et al. discloses a latching mechanism (112) for detachably securing said printhead mounting portion to said ink reservoir mounting-portion thereby holding said ink reservoir in said engaged position (Fig. 12d).

Regarding claim 36, Miyazawa et al. discloses that said latching mechanism includes:

- a handle (left handle of 112) pivotally secured to one of said printhead mounting-portion and said ink reservoir mounting-portion at a pivot (bottom convex of 112);
- a joining arm (right portion of 112) extending from said handle;
- a hook (hook engaging 105) for receiving said joining arm extending from the other of said printhead mounting-portion and said ink reservoir mounting-portion such that said hook operably engages said joining arm when said handle is pivoted about said pivot (Fig. 12d).

Regarding claim 37, Miyazawa et al. further discloses:

- a chassis (body of printer);

- a motor (mechanism for moving carriage);
- said carriage operably secured to the chassis and driven by the motor for reciprocal movement relative to the chassis (inherent function of carriage).

Regarding claim 41, Miyazawa et al. discloses:

- a second ink reservoir (200) operably secured to said carriage;
  - a second printhead operably secured to said carriage (column 7, lines 59-62),
- wherein said first ink reservoir includes black ink (column 7, lines 58-59), and said second ink reservoir includes a plurality of chambers for receiving a plurality of different colored inks (Fig. 7).

Regarding claim 42, Miyazawa et al. further discloses that said second mounting portion moves toward and away from said first mounting portion along a defined path (movement path of 115, Figs. 12's).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2863

Claims 31, 32, 45, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazawa et al. in view of Oda et al. (US 5,552,816).

Miyazawa et al. discloses all the claimed limitation as discussed above.

Regarding claims 32 and 46, Miyazawa et al. further discloses that said ink reservoir is detachably secured to said ink reservoir mounting-portion (Figs. 12's).

However, regarding claims 31 and 45, Miyazawa et al. does not disclose that said printhead is detachably secured to said printhead mounting-portion.

Nevertheless, Oda et al. discloses a printhead (H) being detachably secured to a printhead mounting-portion (C, Fig. 1) for the purpose of providing easy access to the printhead by a capping device.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide Miyazawa et al. with a detachable printhead as disclosed by Oda et al. for the purpose of providing easy access to the printhead by a capping device.



***Allowable Subject Matter***

3. Claims 17-20 are allowed.

***Response to Arguments***

4. Applicant's arguments filed on August 19, 2004 have been fully considered but they are not persuasive.

With respect to the 35 USC 102 and 103 rejections, Applicants argue that Miyazawa does not teach that the printhead is removable from its printhead mounting portion without first requiring the removal of the ink reservoir from its secured position on the ink reservoir mounting portion.

Examiner's position is that Miyazawa discloses that the printhead (118) is removable from its printhead mounting portion (118 is removable from 150, Fig. 12b) without first requiring the removal of the ink reservoir (120) from its secured position on the ink reservoir mounting portion (120 remains secured on 117 while 118 is removable from 150, Fig. 12b).

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See

MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

#### ***Contact Information***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (571) 272-2277. The examiner can normally be reached on M-H from 6:30AM – 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached at (571) 272-2269. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Art Unit: 2863

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, appearing to read "Michael Nghiem", written in a cursive style.

**MICHAEL NGHIEM**  
**PRIMARY EXAMINER**

Michael Nghiem

October 15, 2004